

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method for producing a transgenic cotton plant comprising the steps of:
  - (a) obtaining cotton petiole explants,
  - (b) exposing the petiole explants to a culture of *Agrobacterium tumefaciens* that harbors a vector comprising an exogenous gene and a selectable marker, the *Agrobacterium* being capable of effecting the stable transfer of the exogenous gene and selection agent resistance gene to the genome of the cells of the petiole explant,
  - (c) culturing the petiole explants to induce callus formation,
  - (d) selecting a transformed callus that expresses the exogenous gene,
  - (e) culturing the selected callus in suspension culture to induce formation of embryoids, and
  - (f) regenerating ~~the embryoids into~~ an embryoid to obtain a whole transgenic cotton ~~plants~~ plant.

2. (Currently Amended) The method of claim 1, wherein the petiole explants are pre-cultured for a period of time prior to exposure to the culture of *Agrobacterium tumefaciens*.
3. (Currently Amended) The method of ~~claims~~ claim 1, wherein the culture media used in steps (b)-(e) have glucose as the sole carbon source.
4. (Currently Amended) The method of claim 3, wherein the glucose is ~~in an amount~~ at a concentration of about 10 g/l to about 50 g/l.
5. (Currently Amended) The method of claim 4, wherein the glucose is ~~in an amount~~ at a concentration of about 30 g/l.
6. (Currently Amended) The method of claim 1, wherein the culture media used in steps (b) and (d)-(f) do not contain hormones.
7. (Currently Amended) The method of claim 1, wherein ~~the embryoids~~ embryoid germination regeneration of step (f) is carried out in a medium having a source of nitrogen selected from the group consisting of asparagine, glutamine or both asparagine and glutamine.

8. (Currently Amended) The method of claim 7, wherein the source of nitrogen is ~~in an amount~~ at a concentration of about 700 mg/l to about 5 g/l.
9. (Currently Amended) The method of claim 8, wherein the source of nitrogen is ~~in an amount~~ at a concentration of about 3.8 g/l.
10. (Currently Amended) The method of claim 7, wherein the source of nitrogen is both asparagine and glutamine, and the asparagine is ~~in an amount~~ at a concentration of about 200 mg/l to about 1 g/l and the glutamine is ~~in an amount~~ at a concentration of about 500 mg/l to about 2 g/l.
11. (Currently Amended) The method of claim 10, wherein the asparagine is in an amount of about 500 mg/l and the glutamine is ~~in an amount~~ at a concentration of about 1 g/l.
12. (Currently Amended) The method of claim 1, wherein the suspension culture of step (e) has a duration of less than about 20 days.
13. (Currently Amended) The method of claim 12, wherein the suspension culture of step (e) has a duration of about 10 days to about 20 days.

14. (Currently Amended) The method of claim 13, wherein the suspension culture of step (e) has a duration of about 14 days.
15. (Currently Amended) The method of claim 1, wherein step (c) is carried out in the presence of low ~~concentration~~ concentrations of one or more hormones.
16. (Currently Amended) The method of claim 15, wherein the concentration of any one hormone ~~ranges~~ is from 0 to about 1 mg/l.
17. (Currently Amended) The method of claim 15, wherein step (c) is carried out in the presence of ~~2,4-dichlorophenoxyacetic~~ 2,4-dichlorophenoxyacetic acid ~~in~~ at a concentration ~~ranging~~ from 0 to about 0.5 mg/l and kinetin ~~in~~ at a concentration ~~ranging~~ from 0 to about 1 mg/l.
18. (Currently Amended) The method of claim 17, wherein the ~~2,4-dichloro-phenoxyacetic~~ 2,4-dichlorophenoxyacetic acid is ~~in~~ at a concentration of about 0.05 mg/l and the kinetin is ~~in~~ at a concentration of about 0.1 mg/l.

This paper is believed to constitute a complete response to the Notice of Non-Compliant  
Amendment dated January 14, 2005.

Respectfully submitted,

By 

Barbara Webb Walker  
Attorney for Applicants  
Registration No. 35,400  
ROTHWELL, FIGG, ERNST & MANBECK, p.c.  
Suite 800, 1425 K Street, N.W.  
Washington, D.C. 20005  
Telephone: (202)783-6040